2022 IOWA FREIGHT PLAN

Trends, Issues, and Opportunities Input Exercise

This document contains a list of current and future freight-related trends, issues, and potential opportunities that will be explored and addressed in the 2022 Iowa Freight Plan. These trends, issues, and opportunities are presented in general (impacting all freight transportation modes) and modal categories.

Input request for stakeholders: Review, comment, prioritize, and/or make additions to these lists.

	GENERAL	
1	Agriculture	Increasing agricultural production and changing practices mean reanalyzing the freight network.
2	Automation	Autonomous vehicles; automated rail yards, marine terminals, and warehouses; robotics are being developed.
3	Biorenewables	Growth of lowa's biorenewable chemical industry continues to provide opportunities.
4	E-Commerce	E-commerce is growing and impacting market trends and freight movement.
5	Economics	COVID-19 will most likely have lasting economic impacts on all freight transportation modes.
6	Energy	Growth in United States energy production and exports have impacted infrastructure and supply chains.
7	Fuel	Natural gas as a transportation fuel continues to be explored and utilized.
8	Funding	Infrastructure funding for all modes will continue to be a challenge in the future, requiring exploration of other sources.
9	Industry	Existing need to adapt freight infrastructure for current and future industries and demands.
10	Intermodalism	Continuation of intermodalism/containerization growth creates opportunities while container imbalance creates challenges.
11	Land Use	Current and developing freight trends will impact land use considerations.
12	Manufacturing	Changes in location, sourcing, and density of economic activity (e.g. jobs and manufacturing) will change supply chains.
13	Multimodal	There is a continuous need for multimodal coordination and connections to address freight demand.
14	Panama Canal	Expansion of the Panama Canal is expected to create economic opportunity in Iowa.
15	Regulations	Better coordination, education, and streamlining of freight-related regulations is needed.
16	Resiliency	Supply chain issues, vulnerabilities, and resiliency are critical topics for public and private stakeholders.
17	Trade	New and ongoing trade negotiations will have impacts on freight trends and supply chains.

1 Air Cargo Cargo moved by air has been variable but co commerce.	uld be significantly impacted by the increase in e-

2 Aviation Trends Other developing trends (such as drone delivery) may impact aviation.

	TRUCKING	
1	Automation	Automated trucking concepts continue to be developed and tested.
2	Highway Design	Developing freight-specific design guidance and considerations will help protect and enhance the freight network.
3	First Mile/Last Mile	Last mile deliveries from distribution centers are even more critical with the continuous growth of e-commerce.
4	Human Trafficking	Law enforcement continues to reach out to the trucking industry and others for partnering opportunities in the fight against this crime.
5	Trucking Issues	Truck driver shortages/retention, truck parking issues, and hours of service continue to challenge the industry.
6	osow	Evolving and increasing oversize/overweight (OSOW) movements create challenges.
7	Truck Cargo	Goods moving by truck are steadily increasing.

	RAIL FREIGHT	
1	Energy	Coal use is declining with the increased use of renewable energy, impacting rail tonnage.
2	Network	lowa's rail network has steadily decreased in miles while carrying more freight.
3	Rail Cargo	Rail freight is increasing with larger rail cars and longer trains.
4	Safety	Increased emphasis on safety in rail is yielding positive results but comes at a cost to the industry.

	INLAND NAVIGATION & PORTS		
1	Lock & Dams	Lock and dam infrastructure is aging and deteriorating, negatively impacting efficiency and reliability.	
2	MO River Cargo	Freight demand has declined on the Missouri River but momentum is picking up, especially on the lower river.	
3	MS River Cargo	Freight movement remains steady on the Mississippi River.	
4	Sourcing	Domestic sourcing could drastically impact demand for port utilization.	